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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,818	09/24/2003	Susan Heath Calvin Fletcher	2686/130	5194
2101 7590 09/20/2007 BROMBERG & SUNSTEIN LLP 125 SUMMER STREET BOSTON, MA 02110-1618			EXAMINER VILLECCO, JOHN M	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/669,818

Applicant(s)

FLETCHER ET AL.

Examiner

John M. Villecco

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-27 is/are allowed.
- 6) ☒ Claim(s) 28-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's terminal disclaimer filed September 5, 2007, with respect to claims 1-52 have been fully considered and has been approved. The non-statutory double patenting rejection of claims 1-52 has been withdrawn.
2. Applicant's arguments filed September 5, 2007 with regard to the 35 U.S.C. 101 rejections have been fully considered but they are not persuasive. More specifically, applicant has amended the claims to recite the limitation that the computer program product is on a tangible recording medium. Applicant contends that this amendment overcomes the 35 U.S.C. 101 rejection. However the examiner believes that this limitation does not overcome the 35 U.S.C. 101 rejection of the previous office action. The word "tangible" can mean many different things. As assumedly intended by the applicant, the word "tangible" can mean "discernible by the touch", as per the American Heritage Dictionary definition. However, it can also mean "possible to understand or realize", as per the American Heritage Dictionary definition taken from the website <dictionary.com>. Clearly, a signal is capable of being understood.
3. This fact aside, it is noted that the applicant has claimed that the computer readable medium is tangible and not the computer program product. Page 12, line 12 of the specification clearly states that the computer program product – not the computer readable medium – is a signal. Thus, the definition of the phrase "tangible computer readable medium" is irrelevant since the specification states that the computer program product is a signal. This is clearly a violation of the 35 U.S.C. 101 statute as defined in the USPTO "Interim Guidelines for

Examination of Patent Applications for Patent Subject Matter Eligibility” (Official Gazette notice of 22 November 2005), Annex IV.

4. Therefore, the 35 U.S.C. 101 rejection of claims 28-52 will be repeated.

***Claim Rejections - 35 USC § 101***

5. The USPTO “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101.

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

6. Claims 28-52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 28-52 are drawn to a signal, since the specification clearly defines the computer program product to be a signal. A “signal” embodying functional descriptive material is neither a process nor a product (i.e., a tangible “thing”) and therefore does not fall within one of the four statutory classes of § 101. Rather, a “signal” is a form of energy, in the absence of any physical structure or tangible material. Please see section

(c) of Annex IV of the “Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility” (Official Gazette notice of 22 November 2005).

***Allowable Subject Matter***

7. Claims 1-27 are allowed.

8. The following is an examiner’s statement of reasons for allowance:

Regarding claims 1 and 23, the primary reason for allowance is that the prior art fails to teach or reasonably suggest selecting a first pixel in a first frame having a given color, locating a second pixel in the second frame have the given color, and aligning the first frame and the second frame based upon the locations of the first and second pixels.

As for claim 14 and 22, the primary reason for allowance is that the prior art fails to teach or reasonably suggest selecting a first and last frame with at least one frame in between, selecting an initial pixel in first frame and a final pixel in the last frame, the initial pixel having a first pixel, the final pixel having a final color, determining an interpolated pixel for each from in between the frames, aligning the initial frame, final frame, and the at least one frame in between, based upon the locations of the initial pixel, final pixel and each interpolated pixel.

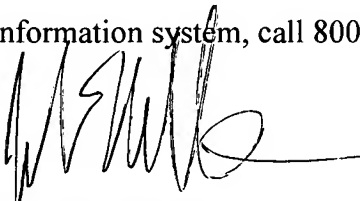
With regard to claims 24 and 25, the primary reason for allowance is that the prior art fails to teach or reasonably suggest interpolating between a color of a pixel in a first image and a color of a pixel in a third image to determine a searchable color, identifying a pixel having a color in a second image within a searchable range of the searchable color, repositioning the images such that the pixels from the first, second and third images are aligned.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (571) 272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John M. Villecco  
Primary Examiner, Art Unit 2622  
September 13, 2007